Principal rivers in which low-water records were established during August-September, 1925—Continued

River and station	Flood stage	Above flood stages—dates		Crest	
		From-	То	Stage	Date
Mississippi drainage					
Grand: Gallatin, Mo Chillicothe, Mo	Feet 20 18	13 13	13 14	Feet 21. 5 21. 3	13 14
West gulf drainage					
Rio Grande: Rio Grande City, Tex San Benito, Tex	15 21	8 9	10 19	21. 8 24. 4	9 11-12
Pacific drainage					
Gila: Kelvin, Ariz Hassayampa: Wickenburg, Ariz	5 6	$\left\{\begin{array}{cc} & 2\\ & 19\\ & 19\end{array}\right.$	5 19 19	7. 0 5. 0 6. 0	4 19 19

MEAN LAKE LEVELS DURING SEPTEMBER, 1925

By United States Lake Survey [Detroit, Mich., Oct. 8, 1925]

The following data are reported in the "Notice to Mariners" of the above date:

	Lakes 1				
Data	Superior	Michigan and Huron	Erie	Ontario	
Mean level during September, 1925: Above mean sea level at New York Above or below—	Feet 601. 40	Feet 578, 22	Feet 570, 90	Feet 244. 56	
Mean stage of August, 1925 Mean stage of September, 1924 Average stage for September last 10 years Highest recorded September	-0.09 -0.40	-0. 20 -1. 31	-0. 18 -1. 05	-0.34 -1.09	
	-1.18	-2, 29	1.43	-1.41	
stage Lowest recorded September	-2.68	-5. 21	-3.04	-3.05	
Average departure (since 1860) of September level from August level	-0.09 +0.05	-1.31 -0.20	-0.38 -0.26	+0.58 -0.40	

¹ Lake St. Clair's level: In September, 1925, 573.59 feet.

THE EFFECT OF WEATHER ON CROPS AND FARM OPERATIONS, SEPTEMBER, 1925

By J. B. KINCER

General summary.—During the first week in September droughty conditions prevailed over nearly all sections of the country east of the Rocky Mountains, and the continued dry weather, excessive sunshine, and, in some places, unprecedented September heat, ripened outstanding crops rapidly and prematurely in many cases. Plowing was practically suspended in most interior States and the seeding of fall grains was impossible in many sections.

During the second week of the month, however, the drought was largely broken by generous rainfall, which was especially effective in practically all the central valley States, and the soil was put in good condition. Late truck, garden crops, and pastures were much revived. In the Southeast the rainfall was insufficient to be substantially beneficial and late crops continued to deteriorate. This was especially true in the States comprising the area from Virginia southward. Damage from the frost that occurred in some central-northern districts about the middle of the month was not material, as most crops had matured.

During the last half of the month conditions remained favorable for agricultural interests in most sections, except that moisture continued largely insufficient in the Southeastern States. In some interior States field work was somewhat interrupted by too much rain near the close of the month, and the soil had become too dry in parts of the Pacific Northwest.

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Small grains.—Harvesting of wheat was practically completed early in the month, and threshing was well along in the northern border States. Until about the 10th it was much too dry for plowing and the preparation of seed beds for the new wheat crop, but thereafter there was sufficient moisture for this work and good progress was reported. By the 15th plowing had been resumed generally, with seeding begun in the upper Ohio Valley and in the Plains States, and by the close of the month sowing was in full progress in much of the Wheat Belt There was some interruption by rainfall to seeding in the lower Great Plains, the lower Missouri Valley, and some upper Mississippi Valley districts. Early-seeded wheat was coming up to a good stand in many localities. Grain sorghums in the lower Great Plains showed improvement after the rains.

Corn.—This crop ripened too rapidly during the first part of the month, because of the prevailing warm, dry weather, and by the 10th about half of the crop was safe from frost in Iowa and Indiana, and the bulk of it was safe in Missouri. Late corn was benefited by rain, especially in the Southern States, but the hot, dry weather early in the month caused some deterioration in the main Corn Belt. At the close of the month the crop was nearly all safe and harvest was well advanced, though late corn was somewhat damaged by frost during the last week in some northeastern districts. On the whole, frost damage this year was negligible.

Cotton.—The first part of the month continued warm and dry and unfavorable for late cotton in nearly all portions of the South. Bolls opened very rapidly and picking and ginning made splendid progress. After the first week, showers and more moderate temperatures over the western half of the belt made much better conditions for the crop, and the late plants made fair to very good advance; there was some damage by wetness to open and unpicked cotton, but this was not extensive. In the eastern portion of the belt it continued warm, dry, and unfavorable for the development of the late crop. third week had generally fair weather in practically all sections, which was favorable for picking and ginning, but rather widespread rains the latter part of the month caused considerable retardation in this work in the west-ern cotton States. Harvest was well advanced for the season at the close of the month.

Miscellaneous crops.—Pastures showed general improvement east of the Rocky Mountains, except in some southeastern districts where it continued too dry. Range conditions continued favorable in the Northwest, and grazing was mostly good in the Southwest. Some livestock were moved to winter ranges in the Rocky Mountain section. Late truck and garden crops improved in the Southern States, particularly in central and west Gulf districts, and unmatured minor crops made good advance quite generally in the interior of the country. Potato harvest was in progress in the northern and and Northeastern States, with generally good returns reported from Pennsylvania and Ohio.